

Dry Bean Fungicide Trial

Trial ID: 2024-DBF02 – R.M. of Glenboro South Cypress

Objective: Quantify the agronomic and economic impacts of a single foliar fungicide application in dry beans.

Summary: There was an average of 41 percent of plants with white mould symptoms at this site at R5 growth stage, but average severity remained low (less than 1 on a 0-5 scale). However, some plants had extensive mycelial growth covering 25-50% of foliage. There were no significant yield differences between navy beans with and without a single application of Zolera FX. Due to the lack in yield response, there was a decrease in profit/ac in the treated area of the trial, equivalent to the cost of fungicide application.

Trial Information

Treatment	Zolera FX vs Untreated
Application Timing	R4
Application Date	July 29
Application Rate	25 ac/jug
Application Method	Broadcast
Soil Texture	Loamy Fine Sand
Previous Crop	Corn
Seeding Date	May 29
Market class	Navy
Seeding Rate	98,000 seeds/ac
Row Spacing	30"
Plant Stand at R5	76,000 plants/ac
Harvest Date	August 19

Precipitation (mm)

	May	June	July	Aug	Total
Rainfall	144	141.2	28.2	64	377.4
Normal	59.9	87.5	81.9	68.4	297.7
% Norm	240%	161%	34%	94%	127%

Summary of Disease Ratings†

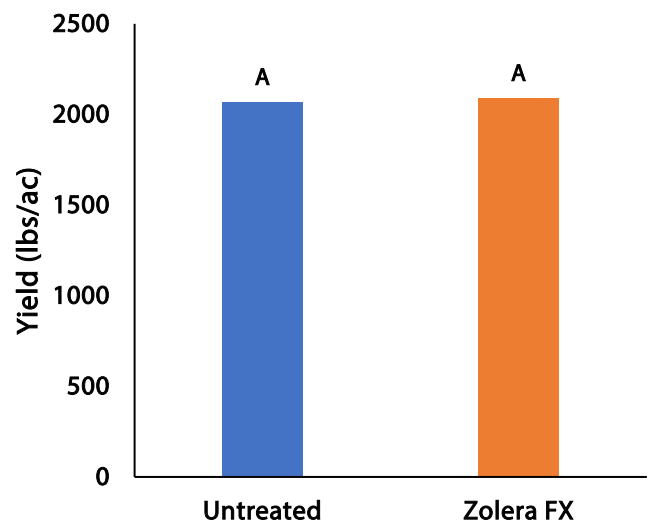
	Bacterial Blight		White Mould	
	UNTRT	Single	UNTRT	Single
Incidence (R5)	100%	100%	43%	38%

† SGL=single application; Incidence = percent of plants infected.
UNTRT=untreated

Field NDVI Image July 22



Yield by Treatment





Overall Yield & Economics

	Mean (lbs/ac)	Cost †	Change in Profit ††
Single Application	2086	\$20/ac	-\$20/ac
Untreated	2064		
Yield Difference	22		
P-Value	0.732		
CV	3.9%		
Significance	No	Economic	No

† Estimated cost; represents product only, does not include application cost

†† Because yields were not significantly different, there is no increased income to offset the cost of the fungicide. Profit/ac declined by the cost of the fungicide application.



White mould (pictured left) early symptoms (left hand photo) and late symptoms (right hand photo). Plants are rated from 0 (no apparent symptoms) to 5 (extensive mycelial growth).